

REMARKS

The issues outstanding in the Office Action of November 9, 2009, are the rejections under 35 USC §101, 112, and 103. Reconsideration of these issues, in view of the following discussion is respectfully requested.

Rejections Under 35 USC §101:

Claims 1-16 have been rejected under 35 USC §101 as a result of the non-standard “use” format. Reformatting of the claims for U.S. practice obviates this rejection and withdrawal thereof is respectfully requested.

Rejections Under 35 USC § 112:

Claims 1-16 have been rejected under 35 USC §112, second paragraph. Reconsideration of this rejection is respectfully requested.

With respect to the portion of this rejection which is predicated on the “use” format, it is again noted that reformatting of the claims for US practice obviates this aspect. With respect to the query concerning lines 25-26 of claim 1, the claim has been clarified along with numerous other clarifying and typographical amendments, and it is submitted that the claim is now clear. The pre-refined oil P_A, recited in this portion of the claim, is substantially free of asphaltenes, has a sulfur content reduced by at least 50%, and has a content of vacuum residue, said vacuum residue containing more than 1% by weight of sulfur, reduced by at least 15% with respect to oil P1. The complete reduction of such vacuum residue, i.e., to 0, as originally recited in the claim, is now the subject of dependent claim 20. Similarly, step d), which was clearly not essential to the process, is the subject of dependent claim 19.

Withdrawal of the rejections under 35 USC §112 is respectfully requested.

Rejections under 35 USC §103:

Solely claims 1, 17 and 18 have been rejected under 35 USC §103 over Brown ‘080. Reconsideration of this rejection is respectfully requested.

Brown teaches a process for removing sulfur and heavy metals from heavy crude oil, by separating heavy crude oil into several fractions which are selectively hydroteated and *recombined* to form a *single* synthetic crude oil. See column 1, lines 7-11. It is clear, from the teaching of Brown, that a single synthetic crude oil is produced, lower in metal content than the starting material and lower in sulfur and nitrogen, but that the issue of asphaltenes in the crude is not addressed. For example, see column 3, lines 19-25. In Fig. 1 of Brown, the three separate fractions produced from the heavy crude, in lines 20, 18 and 16, and a residuum in line 14, are treated with various hydrodesulfurization or hydrodemetalization in processes in 22, 26 and 24, and then are all combined into a single syncrude in line 27.

Accordingly, Brown fails to teach a processes such as that presently claimed in which a pre-refined oil, substantially reduced in asphaltenes, is produced. In the present process, pre-refined oil P_A can be sent for further refining, while residual oil PB can be used, for example, as a coal substitute. See page 19, lines 17 plus of the present specification. Thus, Brown fails to suggest in any way a process which produces the two products presently claimed.

In addition, the products themselves are clearly not suggested by Brown, in as much as the single synthetic crude of Brown is not reduced in asphaltenes, nor suitable as a coal substitute. Thus, claims 16 and 17 are further patentable over Brown.

Withdrawal of the rejection under 35 USC §103 is respectfully requested.

The claims are submitted to be in condition for allowance. However, if the Examiner has any questions or comments, he or she is cordially invited to telephone the undersigned at the number below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

/Harry B. Shubin/

Harry B. Shubin, Reg. No. 32,004
Attorney for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.

Arlington Courthouse Plaza 1

2200 Clarendon Boulevard, Suite 1400

Arlington, VA 22201

Direct Dial: 703-812-5306

Facsimile: 703-243-6410

Attorney Docket No.:PET-2269

Date: February 12, 2010

HBS:jmj